



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,013	09/01/2006	Marilena Gusmeroli	163-667	3082
47888	7590	03/02/2011		
HEDMAN & COSTIGAN, P.C. 1230 AVENUE OF THE AMERICAS 7th floor NEW YORK, NY 10020			EXAMINER	
			SULLIVAN, DANIELLE D	
ART UNIT		PAPER NUMBER		
1617				
MAIL DATE		DELIVERY MODE		
03/02/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/556,013	Applicant(s) GUSMEROLI, MARILENA
	Examiner DANIELLE SULLIVAN	Art Unit 1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 December 2010.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) 1-6 and 9-19 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 7 and 8 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-946) | |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendments filed 12/09/2010 have been entered. Claims 7 and 10 were amended. Claims 1-6 and 9-19 stand withdrawn from further consideration with traverse, pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Groups II-IV. Claims 7 and 8 are under current examination.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Italy on May 21, 2003. It is noted, however, that applicant has not filed a certified copy of the MI2003A001020 application as required by 35 U.S.C. 119(b).

Withdrawn Claim Objections

Claims 7 and 8 have been amended to remove informalities: Formulas A1 through A7 have been rewritten so that all bonds are clearly legible.

Withdrawn Claim Rejections - 35 USC § 112 -2nd

Applicant's amendments have overcome the previous rejections because the structures have been clarified to remove indefiniteness.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins (4,552,677; effective date November 12, 1985).

Applicant's Invention

Applicant claims copper (II) salt of methoxysuccinic acid.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Hopkins teaches copper salts of substituted succinic anhydride derivatives of formula (I) (column 2, line 55). The derivatives substituted group is selected from an alkoxy group (column 2, lines 1-7). The copper salts preferably of oxidative state +2 are preferred since it is the most stable (column 4, lines 58-68).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Hopkins does not disclose the specific compound copper (II) 2-methoxysuccinic acid where the substituted group is a methoxy. However, copper salts of substituted succinic anhydride derivatives are taught to have substituted groups selected from an alkoxy group.

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the instant invention to use the teachings of Hopkins and select a methoxy group to formulate copper (II) 2-methoxy succinic acid with a reasonable expectation of success because Hopkins teaches that an alkoxy group may be selected when forming a copper (II) succinic acid derivative. One of ordinary skill in the art would have been able to formulate the specific species based on the teaching of an alkoxy substituted succinic acid derivative. In view of *In re Wood, Whittaker, Stirling, and Ohta*, 199 USPQ 137 (C.C.P.A. 1978), the addition of a substituent to a known compound is not enough to establish patentability since the claimed compounds would have been expected to have similar properties.

Furthermore, in view of *In re Henze*, 85 USPQ 261 (C.C.P.A. 1950), claims to a compound in homologous series are rejected where reference suggests a class of compounds; it does not matter that reference does not name all members of class since generic designation used is recognized by one of ordinary skill in the art. Therefore, formulating a methoxy substituted succinic acid derivative would have been *prima facie* obvious to one of ordinary skill in the art.

Response to Arguments

Applicant's arguments filed 12/09/2010 have been fully considered but they are not persuasive.

First, Applicant argues Hopkins does not suggest the copper salt of 2-methoxy succinic acid or any other copper salt of a 2-alkoxy succinic acid because only succinic anhydride group substituted at the 2-position with a hydrocarbon group and that group

Art Unit: 1617

must contain 8-35 carbon atoms. The Examiner is not persuaded by this argument because even though the preferred embodiment is 8-35 carbons Hopkins teaches the lower alkyl groups with up to 7 carbon atoms (column 2, lines 27-34). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Additionally, a *prima facie* case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). Compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH₂- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) (stereoisomers *prima facie*

obvious). Hence, one or ordinary skill would have predicted substitution in the 2-position would have the same properties.

Applicants argue claim 8 points to a number of substituent's for R5 and R6 which include C1-C6 and nothing beyond 6 carbons. The Examiner is not persuaded by this argument for the reasons addressed above and because current examination is limited to the elected species 2-methoxy succinic acid.

Applicants finally argue the comparison product, copper oleate which has a shorter carbon chain would not motivate one skilled in the art to reduce the carbon chain length of a copper additive to be used as an oil additive. The Examiner is not persuaded by this argument because the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed. In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE SULLIVAN whose telephone number is (571)270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on (571) 272-3311. The fax phone

Art Unit: 1617

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1617

/Fereydoun G Sajjadi/
Supervisory Patent Examiner, Art Unit 1617